200600027

<u>THER UNITED STATES OF AMERICA</u>

TO ALL TO WHOM THESE PRESENTS SHALL COME;

Syngenta Seeds, Inc.

MICEPAS, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE SET TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR CTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROPAGATION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT, COMMON

'HBK 3266'

In Testimonn Thereof, I have hereunto set my hand and caused the seal of the Hunt Inrich Protection Office to be affixed at the City of Washington, D.C. this ninth day of June, in the year two thousand and six.

Attest:

20m Zuhn

Commissioner
Det Verito Deter

Plant Variety Protection Office Agricultural Marketing Service ctary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and AGRICULTURAL MARKETING SERVICE the Paperwork Reduction Act (PRA) of 1995. SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE Application is required in order to determine if a plant variety protection certificate is to be issued APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426). (Instructions and information collection burden statement on reverse) 3. VARIETY NAME 2. TEMPORARY DESIGNATION 1. NAME OF OWNER OR EXPERIMENTAL NUMBER **HBK 3266** Syngenta Seeds, Inc. Red hind out, event Att L96*9266-1 FOR OFFICIAL USE ONLY 4. ADDRESS (Street and No.or RD No., City, State, Zip Code, and Country) 5. TELEPHONE (include area code) 970-532-3721 200600027 Box 30, 806 North 2nd Street Berthoud, CO 80513 6. FAX (include area code) 970-532-2035 October 20,2001 7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM 8. IF INCORPORATED, GIVE 9. DATE OF INCORPORATION 2000 STATE OF INCORPORATION ORGANIZATION (corporation, partnership, association, etc.) Delaware FILING AND EXAMINATION FEES: 10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Copy to: Chris Bruns **Rob Bruns** 4382.00 PO Box 30 Box 30, 806 North 2nd Street Berthoud, CO 80513 Berthoud, CO 80513 DATE 10/20/2005 rbruns@frii.com 768.00 13. E-MAIL 11. TELEPHONE (Include area code) 12. FAX (Include area code) 970-532-2035 rob.bruns@syngenta.com 970-532-3721 18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) 16. FAMILY NAME (Botanical) 14. CROP KIND (Common Name) X NO Soft Red Winter Wheat Gramineae 15. GENUS AND SPECIES NAME OF CROP 17. IS THE VARIETY A FIRST GENERATION HYBRID? IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE Triticum aestivum APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR YES COMMERICALIZATION. 20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS 19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) (Follow instructions on reverse) X NO (If "no", go to item 23) YES (If "yes", answer items 21 and 22 below a. X Exhibit A. Origin and Breeding History of the Variety 21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO b. X Exhibit B. Statement of Distinctness NUMBER OF CLASSES? X NO C. X Exhibit C. Objective Description of Variety YES IF YES, WHICH CLASSES? FOUNDATION CERTIFIED REGISTERED d. X Exhibit D. Additional Description of the Variety (Optional) 22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO e. X Exhibit E. Statement of the Basis of the Owner's Ownership NUMBER OF GENERATIONS? X NO YEŞ f. X Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. repository) REGISTERED CERTIFIED FOUNDATION g. X Filing and Examination Fee (\$3,652), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office (If additional explanation is necessary, please use the space indicated on the reverse.) 23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? OTHER COUNTRIES? YES NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.) FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.) The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties. SIGNATURE OF OWNER SIGNATURE OF OWNER NAME (Please print o NAME (Please print or type) **Rob Bruns**

CAPACITY OR TITLE

DATE

DATE 10/5/2005

CAPACITY OR TITLE

NAFTA Manager

INSTRUCTIONS

200600027

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificates. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 http://www.ams.usda.gov/lsg/seed.htm.

ITEM

- 19a. Give:
- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 20. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)
- On October 25th, 2004, stock seed was sold to Hornbeck Seed near Stuttgart, Arkansas for seed production.
- 24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing date sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

Exhibit A. Origin and Breeding History of HBK 3266

HBK 3266 (aka L96*9266-1) has the pedigree: Bow `Sib'/2548//Coker 87-13wh. The final cross was made in 1991 at the LSU AgCenter ben Hur Research Farm by Stephen Harrison, LSUAC wheat breeder. Bow "Sib" is entry 155 in the 1987 ARS New Spring Wheat Sources of Leaf Rust Nursery (87SWLRN). It is a CIMMYT line with the designation: CM33203-K-9M-2Y-1M-1Y-1M-0Y. It was selected as a source of leaf rust resistance. 2548 is Pioneer brand 2548. It is PVP 8900112 and was tested as W0030E. 2548 was selected for broad adaptation and high yield. Coker 87-13wh was entry 12 in the 1990-91 ARS Uniform Eastern Soft Red Winter Wheat Nursery. It was later released as Coker 9134 (PVP 9300289).

The first cross, BowSib/2548 was LA9083, the 83rd cross made in 1990. An F1 plant from this cross was grown in the field at Ben Hur during the 1990-91 growing season. This plant was emasculated and pollinated with C87-13 in April of 1991. The final cross was designated LA9168.

F1 seeds of LA9168 were vernalized in petri dishes in a refrigerator during the summer of 1991. These sprouted, vernalized seed were then transplanted to an air-conditioned greenhouse in the fall of 1991. F2 seed were harvested and planted in the field at the LSUAC Ben Hur Farm in January of 1992. individual plants of the space-planted F2 population (LA9168GHL) were evaluated for plant type and disease reaction (leaf rust) in the field during April 1992. Selected plants were marked using red paint and heads were individually harvested from these to become F3 headrows. F3 headrows were planted in November 1992 at the LSUAC Ben Hur Farm. HBK 3266 is derived from the 18th headrow from that population, designated LA9168GHL-18. Individual F3 headrows were evaluated in April 1993 for height, tillering ability, leaf health and color, disease reaction, and relative maturity. LA96168GHL-18 was selected based on these criteria and 5 individual F3 heads were harvested form this row and individually threshed. The F4 headrow, LA9168GHL-18-1 was the 1st of 5 headrows planted at the Ben Hur Farm from the selected F3 headrow during November 1993. It was evaluated and selected in April 1994 using the

same criteria as in the F3. Three heads were harvested from this headrow and individually threshed to become F5 headrows. The F5 headrow designated LA9168GHL-18-1-3, the 3rd head from the selected F4 headrow, selected, was Wheat Headrow #4986 during the 1994-95 growing season. This headrow was selected by Barton Fogleman of AgriPro Wheat with permission from the LSU AgCenter. The F6 generation was grown in observation plots by AgriPro Wheat near Jonesboro, AR in 1995-96 under the designation L96*9266. L96*9266 was yield tested in 1996-97 and 1997-98 in several location in the Midsouth. One hundred purification head rows (F8) of L96*9266 were grown near Jonesboro, AR in 1997-98 and one of these rows was re-selected for higher tillering and stronger straw than was present in the other ninety-nine rows. This reselection was given the designation, L96*9266-1 and was grown in observation plots at Jonesboro, AR and Cleveland, MS in 1998-99 by AgriPro Wheat. L96*9266-1 (HBK3266) has been in advanced testing from 2000 to the present and was tested as AW L96*9266-1 in the 2002-2003 Uniform Southern Soft Wheat Nursery (entry #21). L96*9266-1 was also tested in the state-run Louisiana. Georgia, and South Carolina official wheat variety trials in 2002-03 (as AgriPro L96*9266-1). L96*9266-1 was also in 2003-2004 official state variety trials in Arkansas (as AgriPro L96*9266-1), Louisiana (as APD96*9266-1), Mississippi, Florida, Georgia, South Carolina, Tennessee and Missouri (all as HBK 3266).

In 2000-01, 100 purification headrows were grown near Jonesboro, Arkansas, from heads selected from an F11 plot. Ninety-five of these headrows were judged "true-to-type" and were bulk-harvested. This seed was shipped to Colorado for initial Breeders seed increase. In 2001-02 a 0.2 acre initial Breeders seed increase was grown in Berthoud, Colorado which produced 249 pounds of Breeders seed. In 2003, a 20 acre Breeder seed increase was grown in Ault, Colorado that produced 46,177 pounds of Breeders seed.

HBK 3266 has been uniform and stable since 2002. Less than 0.8% of the plants were rogued from the Breeders Seed increase in 2003. Approximately 90% of the rogued variant plants were taller height wheat plants (8 to 15 cm) and 5% were awnletted plants and 5% were bronze chaffed wheat plants. Up to 0.8% variant plants may be encountered in subsequent generations.

Exhibit B. Statement of Distinctness

HBK 3266 is most similar to the soft red winter wheat 'Pioneer 2580'. However, it can be easily distinguished by the following morphological characteristics:

- HBK 3266 has a narrow glume width; Pioneer 2580 has a wide glume width (Lucerne, CO 2003-2004).
- HBK 3266 has a midlong glume length; Pioneer 2580 has a long glume length (Lucerne, CO 2003-2004).
- HBK 3266 has a middense head density; Pioneer 2580 has a dense head density (Lucerne, CO 2003-2004).
- HBK 3266 does not have hairs on the last internode rachis of the stem;
 Pioneer 2580 has hairs on the last internode rachis of the stem density (Lucerne, CO 2003-2004).

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ST-470-06 (4-03) designed by the Plant Variety Protection Office using Microsoft Word

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 2.5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE DIVISION BELTSVILLE, MARYLAND 20705 EXHIBIT C

OBJECTIVE DESCRIPTION OF VARIETY WHEAT (Triticum Spp.)

Syngenta Seeds, Inc. L96*9266-1 ADDRESS (Street and No. or RD No., City, State, Zip Code, and Country) 806 N. Second Street Berthoud, Colorado 80513 PLEASE READ ALL INSTRUCTIONS CAREFULLY: Place the appropriate number that describes the varietal character of th) when number is either 99 or less or 9 or less respectively. Data for qu Comparative data should be determined from varieties entered in the sa used to determine plant colors; designate system used: _R.H.S lack of response may delay progress of your application. 1. KIND: 1 =Common 2 = Durum 3 = Club 4 = Other (specify) 3. COLEOPTILE ANTHOCYANIN: 1 = Absent 2 = Present	antitative plant cha ame trial. Royal Ho	kes below. Place a zero in the fi tracters should be based on a n orticultural Society or any recogi Please answer	rst box (elg., 0 9 9 or 0 9 ninimum of 100 plants. nized color standard may be
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1=Common 2=Durum 3=Club 4=Other (specify) 3. COLEOPTILE ANTHOCYANIN:	[]	TION:	
2=Durum 3=Club 4=Other (specify) 3. COLEOPTILE ANTHOCYANIN:			
- · ·		1=Spring 2=Winter 3=Other (specify)	
1=Absent 2=Present	4. JUVENILE P	LANT GROWTH:	
1	2	1=Prostrate 2=Se	mi-erect 3=Erect
5. PLANT COLOR (boot stage):	6. FLAG LEAF	(boot stage):	
1 = Yellow-Green 2 = Green	1	1 = Erect	2 = Recurved
3 = Blue-Green *head and light green plant	2	1 = Not Twisted	2 = Twisted
	2	1 = Wax Absent	2 = Wax Present
7. EAR EMERGENCE:			
1 0 1 Number of Days (Average)			
Number of Days Earlier Than	*		·
Same As	*		<u></u>
0 0.7 Number of Days Later Than	* AGS 2000	- .	
*Re	elative to a PVPO-A	approved Commercial Variety G	rown in the Same Trial

13.	SEED:				
	A. SHAPE		E.	COLOR	200600027
		1 = Ovate		2	1 = White
	1	Z = Ovai		3	2 = Amber
		3 = Elliptical			3 = Red 4 = Other (Specify)
	B. CHEEK	<	F.	TEXTURE	· · · · · · · · · · · · · · · · · · ·
	5. 01,22.	1=Kounded	• • •		T = Hard
	1	2=Angular		2	2 = Soft
					3 = Other (Specify)
	C. BRUSH		Ģ.	PHENOL	L REACTION (See Instructions)
		1 = Short	ared		1 = Ivory 4 = Dark Brown
	2	2 = Medium 1 2 = Collared		0	2 = Fawn 5 = Black
	<u></u>	3 = Long			3 = Light Brown
	D. CREASE		H.	SEED WE	VEIGHT
	1	1 = Width 60% or less of Kernel		N	A g/1000 Seed (Whole number only)
		2 = Width 80% or less of Kernel 3 = Width Nearly as Wide as Kernel			g/1000 Seed (Whole number only)
		5 - Width Nearly as Wide as Nemel	1. (GERM SIZ	ize
		1 = Depth 20% or less of Kernel			☐ 1 = Small
	1	2 = Depth 35% or less of Kernel		3	2 = Midsize
	<u></u>	3 = Depth 50% or less of Kernel			3 = Large
14	DISEASE:	PLEASE INDICATE THE SPECIFIC RACE OR ST	'RAIN	TESTED)
• • • •	510-110-	(0 = Not Tested 1 = Susceptible		Resistant	
	0	,	3		Leaf Rust (Puccinia recondita f. sp. tritici) Field races
		Stem Rust (Puccinia graminis f. sp. tritici)	\vdash	=	•
	0	Stripe Rust (Puccinia striiformis)		=	Loose Smut (Ustilago tritici)
	0	Tan Spot (Pyrenophora tritici-repentis)			Flag Smut (Urocystis agropyri)
	0	Halo Spot (Selenophoma donacis)		=	Common Bunt (Tilletia tritici or T. laevis)
	0	Septoria nodorum (Glume Blotch)		╡	Dwarf Bunt (Tilletia controversa)
	0	Septoria avenae (Speckled Leaf Disease)		=	Karnal Bunt (Tilletia indica)
	0	Septoria tritici (Speckled Leaf Blotch)	0		Powdery Mildew (Erysiphe graminis f. sp. tritici) Field races
	0	Scab (Fusarium spp.)	0	╡	Snow Molds
	0	Black Point (Kernel Smudge)		╡	Common Root Rot (Fusarium, Cochliobolus and Bipolaris spp.)
	0	Barley Yellow Dwarf Virus (BYDV)	0	_	Rhizoctonia Root Rot (Rhizoctonia solani)
	0	Soilborne Mosaic Virus (SBMV)	0	굨	Black Chaff (Xanthomonas campestris pv. translucens)
	0	Wheat Yellow (Spindle Streak) Mosaic Virus	0	=	Bacterial Leaf Blight (Pseudomonas syringae pv. syringae)
	0	Wheat Streak Mosaic Virus (WSMV)		╡	Other (specify)
		Other (specify)	Ļ	==	Other (specify)
		Other (specify)		=	Other (specify)
	<u> </u>	Other (specify)			Other (specify)
15.	INSECT:	(0=Not Tested; 1=Susceptible; 2=Resistant; 3=I PLEASE SPECIFY BI	nterme	•	4=Tolerant)
	0	Hessian Fly (Mayetiola destructor)		⊸`	Other (specify)
	0	Stern Sawfly (Cephus spp.)		Ī	Other (specify)
	0	Cereal Leaf Beetle (Oulema melanopa)			Other (specify)
	ST-470-06 (4-03) designed by	the Flant Variety Protection Office using Microsoft Word		-	
					<u>ے</u>

15. INSECT: (continued) (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)

	PLEASE SPI	ECIFY BIOTYPE (where needed)	200600027
0	Russian Aphid (Diuraphis noxia)	Other (specify)	
0	Greenbug (Schizaphis graminum)	Other (specify)	
0	Aphids		
ADDITIONAL	L INFORMATION ON ANY ITEM ABOVE, OR	GENERAL COMMENTS:	
ADDITIONAL		GENERAL COMMENTS:	

Exhibit D. Additional Description of HBK 3266

HBK 3266 is a soft red winter wheat bred at LSU and developed by AgriPro. HBK 3266 is a medium height wheat with medium-early season heading and maturity. HBK 3266 has shown intermediate tolerance to the field races of Leaf rust.

Juvenile growth habit is semierect. Plant color at boot stage is light green with a very blue green head color. Flag leaf at boot stage is erect and twisted. Waxy bloom is present on the head, stem and flag leaf sheath. Anther color is yellow. Head shape is tapering, middense and awned. Glumes are glabrous, narrow in width and midlong in length with oblique shoulders and short length acuminate beaks. Seed shape is ovate. Brush hairs are medium in length and occupy a midsized area of the seed tip. Seed crease depth is shallow and width is narrow. Seed cheeks are rounded.

HBK 3266 grain yield data indicates that it is adapted to most of the midsouth and lower southeastern soft wheat areas.

UGA Locs TG PG

89 101

PG-f MG

92 96 107 113 102

89

MG EC

Clem. Locs EC LC

107 112 100

115 118

111 118

SCe

98

98

2000 - 2004 Data on AgriPro Wheat Agronomy & Pathology

HEADING											Agreno	my & I	atholog	;y						
	'00				•	'01		'02				'03					LSU I	nes		
VARIETY	LL	CS	JН	PSR		CS		CS	DA	JА		DA	SM	DA	SA	BA	BL	CL	XL	SI
AGS 2000	88	92	107	105	_	106	-	106	106	113	_	109	118	108	109	108	96	78	92	96
HBK 3266	90	98	109	109		107		109	108	116		107	119	107	107	109	98	82	97	94
HEADING																				
	'04						Uofa	A Locs				MSU				LSUL	nes		UGA	-
VARIETY	CS	DA	PSR	SM	PG	KC	Ksr	Kib	Mar	St	St-H	BM	CM	IM	NM	WL	JL	BCL	TG	PC
AGS 2000	97	99	111	111	91	106	111	105	99	105	107	103	97	100	93	86	88	84	85	92
HBK 3266	100	102	111	113	91	109	113	108	102	106	108	98	98	101	89	86	93	85	86	89
This average i		•			-															
HEIGHT																				
VARIETY	'00 LL	oe.	340	03.5		'01		~		02				'03						
GS 2000	103	90 90	MC 105	SM 99		CS	DA	SM	-	DA	JAJH			CS	DA	SM	CS	DA	SA	B.
						93	95	95		94	92	91		92	100	98	90	100	84	82
1BK 3388																				
HBK 3266	114	99	109	109		97	98	102		96	94	98		92	105	106	97	107	84	80
	LSUL	ocs				UGA	Locs		Clem.	96	94	98		92	105	106	97	107	84	80
/ARIETY	LSU L BL	ocs CL	XL	SL	WL	UGA I	Locs PG	MG	SC	EC	LC	98 FC		92	105	106	97	107	84	80
ARIETY	LSU L BL	ocs CL 99	XL 91	SL 109	97	UGA 1 TG	Locs PG 84	MG 91	SC 102	EC 84	LC 91	FC 84		92	105	106	97	107	84	80
VARIETY AGS 2000 HBK 3266	LSU L BL	ocs CL	XL	SL		UGA I	Locs PG	MG	SC	EC	LC	FC		92	105	106	97	107	84	80
VARIETY AGS 2000	LSU L BL 107 102	ocs CL 99	XL 91	SL 109	97	UGA 1 TG	Locs PG 84	MG 91	SC 102	EC 84 97	LC 91 86	FC 84		92	105	106	97	107	84	80
VARIETY AGS 2000 IBK 3266	LSU L BL 107 102	ocs CL 99 99	XL 91 91	SL 109 104	97 107	UGA 1 TG 94 99	PG 84 97	MG 91 91	SC 102 112	EC 84 97 U of A	91 86 Locs	FC 84 84	MSU						84	80
VARIETY AGS 2000 IBK 3266	LSU L BL 107 102 '04 CS	OCS CL 99 99	XL 91 91 CA	SL 109 104	97 107 SM	UGA 1 TG 94 99	84 97	MG 91 91	SC 102 112 VA	EC 84 97 U of A Ksr	LC 91 86 Locs Kib	FC 84 84 Mar	OM	вм	СМ	ſМ	NM	RM	84	80
VARIETY AGS 2000 HBK 3266 VARIETY AGS 2000	LSU L BL 107 102 '04 CS 109	OCS CL 99 99	XL 91 91 CA 96	SL 109 104 MC 99	97 107 SM	UGA 1 TG 94 99 PG 81	84 97 8C 86	MG 91 91 91 PC 82	SC 102 112 VA 89	EC 84 97 U of A Ksr 76	LC 91 86 Locs Kib	FC 84 84 Mar	OM 102	BM 94	CM 99	KM 81	NM 84	RM 89	84	80
ARIETY AGS 2000 HBK 3266 VARIETY AGS 2000	LSU L BL 107 102 '04 CS	OCS CL 99 99	XL 91 91 CA	SL 109 104	97 107 SM	UGA 1 TG 94 99	84 97	MG 91 91	SC 102 112 VA	EC 84 97 U of A Ksr	LC 91 86 Locs Kib	FC 84 84 Mar	OM	вм	СМ	ſМ	NM	RM	84	80
VARIETY AGS 2000 HBK 3266 VARIETY AGS 2000	LSU L BL 107 102 '04 CS 109	99 99 DA 104 106	XL 91 91 CA 96	SL 109 104 MC 99 98	97 107 SM	UGA 1 TG 94 99 PG 81	84 97 8C 86	MG 91 91 PC 82 83	SC 102 112 VA 89 90	EC 84 97 U of A Ksr 76	LC 91 86 Locs Kib	FC 84 84 Mar	OM 102	BM 94	CM 99	KM 81	NM 84	RM 89	84	80
/ARIETY AGS 2000 IBK 3266 /ARIETY AGS 2000 IBK 3266	LSU L BL 107 102 '04 CS 109 105	99 99 DA 104 106	XL 91 91 CA 96	SL 109 104 MC 99	97 107 SM	UGA 1 TG 94 99 PG 81 79	PG 84 97 SC 86 84	MG 91 91 PC 82 83 Clem.	SC 102 112 VA 89 90 Locs	EC 84 97 U of A Ksr 76 71	LC 91 86 Locs Kib 97 99	FC 84 84 84 Mar 94 97	OM 102	BM 94	CM 99	KM 81	NM 84	RM 89	84	80
VARIETY AGS 2000 IBK 3266	LSU L BL 107 102 '04 CS 109 105 LSU L	DA 104 106	XL 91 91 CA 96 95	SL 109 104 MC 99 98 UGA	97 107 SM 101 102	UGA 1 TG 94 99 PG 81	84 97 8C 86	MG 91 91 PC 82 83	SC 102 112 VA 89 90	EC 84 97 U of A Ksr 76	LC 91 86 Locs Kib	FC 84 84 Mar	OM 102	BM 94	CM 99	KM 81	NM 84	RM 89	84	80

VARIETY	Leaf Rust AVG	'04 CS	CA	MC	PC	'03 GS	DA	MA	'02 DA	MA	JA	DT	SM	'00 MA	
AGS 2000	1.7		2	2	1	1	1	1	1	2	2	2	4	1	12 Location-Years
HBK 3266	1.3		. 1	1	I	1	1	1	2	2	1	1	1	2	12 Location-Years

1= Resistant, 9= Very Susceptible

Location Abbrevlations	,
BA » Bay, AR (Syngenta)	HK ≈ Hopkinsville, KY
BC = Bertie Co., NC (NCSU)	HN = Haubstadt, IN
BCL = BossierCity, LA (LSU)	IM = Issaquena Co., MS (MSU)
BL = Baton Rouge, LA (LSU)	JA = Jonesboro, AR
BM = Brooksville, MS (MSU)	JH = Jonesboro, AR (high regent)
CA = Crawfordsville, AR (sandy)	JL = Jeanerette, LA (LSU)
CI = Carmi, IL	KC = Kinston, NC (NCSU)
CL ~ Crowley, LA (LSU)	Kib = Kibler, AR (UofA)
CM ~ Cleveland, MS (MSU)	Kst = Keiser, AR (UofA)
CS = Cleveland, MS	LC = Clemson, SC (late)
DA = DeWitt, AR	LL = Lake Providence, LA
DT = Dyersburg, TN	MA = Marion, AR (sandy)
EC = Clemson, SC (early)	Mar = Marianna, AR (UofA)
FC = Florence, SC (Clemson)	MC = Marion, AR (heavy clay)
GH = Greenhouse	MG = Midville, GA (UGA)
GS = Greenville, MS (TNS)	NM = Newton, MS (MSU)
HA = Holly Grove, AR	OM = OliveBranch, MS (MSU)

PC = Flymouth, NC (NCSU)
PG = Flains, GA (UGA)
PSR = Jonesborp, AR (Purc Seed Rows)
RC = Rowan Co., NC (NCSU)
RM = Raymond, MS (MSU)
RM = Raymond, MS (MSU)
RM = Blackwille, SC (Clemson Ext.)
SC = Blackwille, SC (Clemson Ext.)
SL = SL Josephs, LA (LSU)
SM = Charleston, MO (or Sikeston in '01-'00)
St = Stuttgart, AR (UofA)
SCH = Stuttgart, AR (UofA)
TG = Titlon, GA (UGAaxt)
VA = Southeastern VA (FFR/SS)
WL = Winnsboro, LA (LSU)
XL = Alexandria, LA (LSU)

AgriPro Soft Wheat Quality Summary

Flour/Wheat Quality

Year-Loc	Wht Prot 14%m	Flr Prot 14%m	Norris Hrd	Brk Flr %	Tot Fir %	Ash 14%m	SRC LA %	SRC SUC %	SRC SC %	SRC H2O %	SRC ETH %	Cooki e Dia. mm	Top Grain R
						HB	K 326	6					
2003 - DA	11.8	10.0	7	42.1	68.3	0.418	114.4	97.70	68.10	51.70	41.10	19.0	6.0
2002 - SM	10.6	9.2	-3	42.2	69.0	0.401	107.6	96.34	70.69	56.04	40.60	18.5	4.0
2002 - DA	10.1	8.8	-2	40.0	69.0	0.407	110.8	95.65	71.26	55.11	42.30	18.4	5.0
2001 - SM	11.5	10.0	16	41.7	69.1	0.403	118.8	100.4	67.30	53.45		19.0	4.0
2001 - DA	8.6	7.1	3	46.4	69.2	0.408	110.5	95.40	72.19	54.82		19.2	4.0
Average:	10.5	9.0	4	42.5	68.9	0.407	112.4	97.1	69.9	54.2	41.3	18.8	4.6
						BE	RETT	A					
2003 - DA	10.0	8.5	7	44.9	66.5	0.414	121.3	97.70	76.60	56.10	44.70	19.0	6.0
2002 - SM	10.0	8.3	0	42.8	69.1	0.376	127.2	107.8	76.12	58.33	44.14	18.9	5.0
2002 - DA	8.7	7.4	-4	43.5	70.1	0.380	118.8	99.46	73.91	55.13	47.36	19.2	4.0
2001 - SM	10.0	8.5	14	45.9	71.1	0.373	118.1	103.7	72.51	54.94		19.2	2.0
2001 - DA	8.3	6.8	6	48.9	69.8	0.359	112.5	104.2	74.88	58.19		19.0	2.0
Average:	9.4	7.9	5	45.2	69.3	0.380	119.6	102.6	74.8	56.5	45.4	19.1	3.8

R - rating 1-excellent, 9 very poor

U.S. DEPARTMENT OF AGRICULTURE Application is required in order to determine if a plant variety protection AGRICULTURAL MARKETING SERVICE certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426). **EXHIBIT E** STATEMENT OF THE BASIS OF OWNERSHIP 2. TEMPORARY DESIGNATION 3. VARIETY NAME 1. NAME OF APPLICANT(S) OR EXPERIMENTAL NUMBER HBK 3266 L96*9266-1 Syngenta Seeds, Inc. 4. ADDRESS (Street and No.or RD No., City, State, Zip Code, and Country) 6. FAX (include area code) 5. TELEPHONE (include area code) 806 N. Second Street 970.532.3721 970.532.2035 Berthoud, Colorado 80513 7. PVPO NUMBER 200600027 NO 8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain 9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country. Xlиo If no, please answer one of the following: YES X No 10. Is the applicant the original owner? a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)? NO If no, give name of country b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company? NO If no, give name of country 11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed): Please see following page.

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

- 1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
- 2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species
- 3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provide and employer.

Exhibit E. Statement of the Basis of Applicant's Ownership

The variety for which Plant Variety Protection is hereby sought was originally developed as a breeding population by Dr. Stephen Harrison at Lousinana State University. By Agreement, this F6 derived line was shared with AgriPro in 1995 with all rights being transferred to AgriPro.

In September 2005, all rights retained by AgriPro, a business unit of Garst Seed Company, were transferred to Syngenta Seeds, Inc. by agreement.

Barton Fogleman, an employee of AgriPro, a business unit of Syngenta Seeds, Inc. completed the development of this variety. By agreement between employees and AgriPro all rights to any invention, discovery, or development made by the employee while employed by AgriPro, were assigned to AgriPro, with no rights of any kind pertaining to 'HBK 3266' being retained by the employees.